AlcoDigital™ 3000

Personal Breathalyzer

User Manual v1.1

Limitations of Use

Note: Use of this product implies acceptance of the following Conditions of Use:

Because of the variables in the timing of Alcohol Consumption, individual metabolism and self administration, by continuing to purchase this item the user of this product agrees:

Not to hold the manufacturer, dealer, wholesaler, or distributor responsible for the consequences of any decision, based on the use of this product, to operate any vehicle, boat, or aircraft or other equipment or to take part in any activity where the effect of alcohol consumption may be a factor and:

To hold them harmless from the claims of others arising out of any such decision.

The effects of alcohol on the person are unpredictable and vary from person to person.

We do not condone the irresponsible consumption of alcohol in any circumstances and recommend that if any doubt exists the user should refrain from making any decision that may be impaired by alcohol and should not carry out any act where the effect of alcohol consumption may be a factor.

The equipment supplied and specifications quoted are tested under controlled laboratory conditions which may or may not be reproduced by the user. The only way to be certain that there is no residual alcohol in the blood is to abstain from any form of consumption for a period of at least 24 hours or more, depending upon the quantity consumed.

These products should be used only to give an *indication* of the possible presence of alcohol in the blood.

The user must not rely solely upon the indications provided by this equipment and must use his/her own judgment, taking all factors into account, to determine whether it is safe and/or legal to operate a vehicle, boat, plane, use any other equipment or carry out any other function where their ability to do so may be impaired by the effects of alcohol.

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For Your Safety

Strictly follow the Instructions for Use
Any use of the device requires full understanding and strict observation of these instructions.The device may only be used for the purposes specified here.

Maintenance
Repair of the device may only be carried out by authorised service personnel. We recommend having AlcoDigital service personnel carry out any calibration, repair and maintenance work. Only AlcoDigital original parts may be used for maintenance. Failure to observe the recommended Maintenance Intervals will invalidate the warranty.

Accessories
Only use accessories supplied by AlcoDigital Limited

Safety Symbols used in this Manual
While reading this manual, you will come across a number of warnings concerning some of the risks and dangers you may face while using the device. These warnings contain "signal words" that will alert you to the degree of hazard you may encounter. These signal words and the hazard they describe are specified as follows:

⚠ CAUTION
Indicates a potentially hazardous situation which, if not avoided, could result in physical injury to you, or damage to the product. It may also be used to alert against unsafe practices.

Notice
Additional information on how to use the device.

AlcoDigital is a registered trademark of AlcoDigital Limited

Intended Use

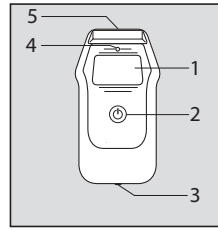
This device is used to quickly determine the intoxication of individuals by measuring the breath alcohol concentration.

The AlcoDigital 3000 is calibrated before delivery and is valid for 12 months or 500 tests, whichever occurs first. The calibration date can be taken from the power up display and/or the label on the rear of the device.

NEVER RELY SOLEY UPON THE RESULTS OF THE ALCODIGITAL 3000
to make any decision that may result in Death, Injury or Proscecution.

What is What?

1 Display
2 "ON/OFF" button
3 Data Socket (for service only)
4 Lamp red/green
5 Mouthpiece connection



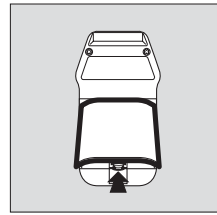
Before Use

Inserting the Batteries

When using the device for the first time or when using an alkaline cell as power supply and the battery symbol on the display indicates "empty".

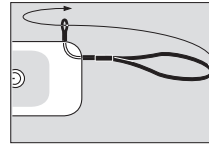
- Gently press the lock on the battery cover and remove the cover.
- When inserting the batteries, ensure correct polarity!
- Close the battery cover.

Supplied batteries:
2 x 1.5 V alkaline cells (Mignon, LR6, AA)



Attaching the Wrist Strap

- Push the fixing strap of the wrist strap through the hole in the housing and make a loop.
- Pull the bigger loop through the smaller eyelet.



Battery Symbol

Indicates the state of charge of the batteries:

Full battery

Battery capacity 2/3 full

Battery capacity 1/3 full

Low battery

Buttons

"ON/OFF" button

Button to switch the device on/off and to continue the measurement.

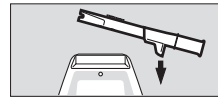
Legal Maximum Driving Limits

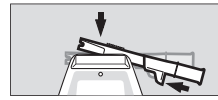
The AlcoDigital 3000 can be dealer-configured to display the result in six different standards: BAC%, µg/100ml, Promile, mg%, mg/L & g/L. **As standard it is supplied in Europe set to µg/100ml and in the USA to BAC%.**

At time of printing, the following national limits applied:
United Kingdom, Ireland: 35 µg/100ml displayed as 35 *(approximately 0.08BAC%)*
France, Germany, Italy, Spain, Netherlands: 24 µg/100ml *(approximately 0.05 BAC%)*
Norway, Sweden: 9 µg/100ml *(approximately 0.02 BAC%)*
USA: (most states) 0.08 BAC% *(approximately 35µg/100ml)*

Mounting the Mouthpiece

- Open the mouthpiece packaging. The mouthpiece can be used to the left or right of the unit
- Locate the small lug in the top of the unit with the hole in the base of the Mouthpeice and press down where the surface of the mouthpiece has a ribbed design on it.
- The mouthpice will click into place.





Switching ON and OFF

Switching ON

- Keep the ⏻ button pressed for approx. 1 second until the start screen is displayed.

Switching OFF

- Keep the ⏻ button pressed. The device switches off after two seconds.

Automatic Switch OFF

The device switches off automatically four minutes after the last use.

Important - please read thoroughly prior to using the Breathalyzer for the first time.

Precautions

For Hygeine reasons, use a new mouthpiece for each test subject.

Do not expose the sensor to contamination, e.g. by drinking alcoholic beverages or smoking just before starting the measurement. This reduces the sensor service life, the results are likely to be inaccurate and future accuracy will be affected.

Requirements for the Test Subject

Maintain a waiting period of at least 20 minutes after drinking alcohol or smoking! Note that rinsing the mouth with water will not reduce the waiting period required.

Before sampling, the test subject should breathe normally and calmly.

The test subject must be able to provide the required minimum respiratory volume of 1.2 L. For this purpose, the breathing flow must be constant for a certain minimum blowing period.

Automatic Measurement

The sampling is automatically triggered after reaching the minimum respiratory volume (1.2 litres of air) and the minimum blowing period.

How to take a Sample

Press the on/off button ⏻ for 1 second to turn on the Breathalyzer. After two seconds, "WAIT" appears on the display.

After six seconds, "READY" appears on the display and a short acoustic signal sounds. Simultaneously, the current test number is displayed. The green LED flashes. The device is ready to start testing.

Blow Technique

The test subject must breathe **evenly** and **continuously** into the mouthpiece. The sample must be taken from a single breath; high pressure is NOT required and will result in a sample fail message. A continuous tone sounds and "Blow" is shown on the display during sampling.

The green lamp flashes and a "click" will be heard when a sufficient sample volume has been reached.

"WAIT Analyzing" then appears on the display for 5 to 25 seconds (depending upong temperature and sample concentration).

The measured result appears on the display.

Repeat Testing

To repeat the breath sample, press the ⏻ button to recycle the sensor. During the recovery period "WAIT" will appear on the display.

Sample Errors

If the breath sample volume is insufficient, "Insufficent Volume" appears on the display, the beeper sounds briefly and the red LED flashes.

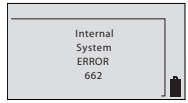
Press the on/off button for 1 second to recommence the sample process.

System Errors

System error messages indicate an internal malfunction. If Switching the device on and off several times fails to restore the device to normal operation, contact technical service via the website at www.AlcoDigital.co.uk

Eratic Blow Sample

When exhaling unsteadily, e.g. by abruptly stopping to exhale or by sucking towards the end of the breath sample, "Blow Interuption" appears on the display. A beeper sounds and the red lamp flashes. To repeat the breath sample, press the ⏻ button. The device can be used again after 4 to 30 seconds.



Maintenance Intervals

As required:

- Replace the batteries, see page 11.

Calibration:

- Have the device calibrated ***at least once a year***, or every 500 tests as the measuring inaccuracy increases gradually due to drift factors. Only authorised persons may carry out the calibration and we recommend returning the device to AlcoDigital for servicing needs. See the calibration page at www.AlcoDigital.co.uk for details.

Storage

- The device consumes a small amount of current even when switched off. Store at room temperature and avoid extremes of humidity which may either dry out the sensor or cause internal moisture damage.

Notice
If case of long-term storage remove the batteries from the device if it will not be used for more than six months. This prevents possible damage to the device caused by leaking batteries.

Cleaning

- Do not dip the device into liquids and do not allow the connection sockets to get wet!
- Wipe the device with a disposable cloth.
- Do not use cleaning agents containing alcohol or solvents.

Replacing the Batteries

Insert a new battery when using an alkaline cell as power supply and the battery symbol on the display indicates "empty". Always have spare batteries at hand to be able to immediately continue use of the device should the batteries become spent.

Required batteries:
2 x 1.5 V alkaline cells (Mignon, LR6, AA)

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⚠ CAUTION
Danger of Explosion! Do not throw used alkaline cells into open fire, do not recharge them and do not try to force them open.

Dispose of batteries as special waste according to local waste disposal regulations. Information can be obtained at local environmental protection agencies and Town Halls as well as at suitable waste disposal companies.

How to Dispose of the Device

Since August 2005, regulations concerning the disposal of electrical and electronic devices have come into force in the entire European Union; these regulations are specified in the Directive 2002/96/EC of the European Parliament and in national laws relating to this device.

Should you be unable to dispose of the device safely you can return it to AlcoDigital Limited free of charge for safe Disposal.

Troubleshooting

Fault	Cause	Remedy
The device switches off automatically.	Batteries are discharged.	Replace the batteries, page 11.
	The device has been ready to measure for more than four minutes.	Switch the device on again.
Device does not power up.	Batteries are discharged.	Insert new batteries.
Insufficient volume/sample invalid.	The test subject is not breathing continuously or vigourously enough.	Ask test subject to breathe continuously and more vigourously into the mouthpiece.

Error message on the display	Cause	Remedy
	The measuring range is exceeded. Alcohol residues within the mouth may cause incorrect measurement values.	Maintain a waiting period of at least 15 minutes after drinking alcohol (see page 7). To repeat the breath sample, press the ⏻ button.
"Internal System ERROR" with error code.	Device Errors	Remove the batteries (for 2 seconds), then insert them again; contact AlcoDigital Technical Support.

Technical Data

Principle of Measurement	DraegerSensor (R) 1 1/4" Electrochemical Fuel Cell

Measuring Range

Breath alcohol concentration	0.00 to 2.5 mg/L 0 to 2500 µg/L 0.000 to 0.500 g/210L 0 to 250 µg/100ml 0 to 250 µg%
Blood alcohol concentration	0.00 to 5.00 ‰ (ProMile) 0.000 to 0.500 % 0.00 to 5.00 g/L 0 to 500 µg/100 mL 0 to 500 µg% 0.00 to 5.00 mg/mL (This data is given using a conversion factor of 2100 between breath and blood alcohol concentration.)
LED Indications	≤ 24 µg/100 mL - Green 25 ~ 33 µg/100 mL - Amber ≥ 34 µg/100 mL - Red

Range of Indication

The range of indication and the measuring range are identical. If the measuring result is outside the measuring range, three arrows will be displayed to indicate over-range.

Ambient Conditions

For operation	0 to 40°C, 10 to 90 % relative humidity
For storage	-20 to 60°C

Sampling

Minimum blowing time	2 s
Minimum volume	1.2 L

Accuracy

max. repeatability error with an ethanol standard

0 to 1.00 ‰	±0.05 ‰
0 to 0.100 %	±0.005 %
0 to 0.50 mg/L	±0.03 mg/L
0 to 50 µg/100 mL	±3 µg/100 mL
0 to 1.00 g/L	±0.05 g/L
>1.00 ‰ >0.100 % >0.50 mg/L >50 µg/100 mL >1.00 g/l	±6 % of the measurement value

Dimensions	140 mm x 80 mm x 35 mm (W x H x D)
Weight	approx. 195 g
Power Supply	
Batteries	2 x 1.5 V alkaline cells (Mignon, LR6, AA),
CE Marks	Electromagnetic compatibility (Directive 89/336/EEC), for residential, commercial and light-industrial environments.

Warranty

The manufacturer warrants this Breathalyser to be free from defects in workmanship or material (excluding calibration) under normal use for two years from the date of purchase. Manufacturer's obligations under this limited warranty are limited to replacing, adjusting, or repairing the unit if returned along with the proof of purchase. This warranty is void if the unit has been tampered with, maliciously damaged, or physically abused. The enforceability of this warranty is limited to the original consumer purchaser and is not transferable to, or enforceable by, any subsequent owner. In the event of a defect, malfunction or other failure to conform to this warranty, AlcoDigital, will, at its sole discretion, repair or replace the unit. Should the unit be repaired or replaced, this will not extend the orginal expiration date of the warranty; it is not a rolling warranty period. **You are responsible for all shipping cost in connection with warranty service.** This warranty commences on the date of purchase and shall be effective for a period of Two years and does not affect your statutory rights.

Should you need to return your unit or obtain service during the warranty period, please call **or email our customer support team via the website at www.AlcoDigital.co.uk** to obtain a RMA number and shipping instructions. Remember to return your detector postage paid, insured and in suitable packaging. We also receive around 2 to 3 detectors per month with no identifying labels, return address or invoices – just a breathalyzer in a bag! When this happens we are unable to do anything until the customer contacts us to find out what is happening. Therefore please DO NOT return your unit without contacting us first, and ensure that your device is clearly marked with the owners' details!

Disclaimer

AlcoDigital makes no warranties, expressed or implied, as to the ability of this device to determine whether a person is intoxicated, and expressly disclaim any liability for incidental, special, or consequential damages of any nature.

The user undertakes not to make any decisions and/or carry out any actions based upon the reading of this device. *AlcoDigital assume no responsibility for consequences of subjects who test negative when using this device and later show that they are under the influence of alcohol or their judgment has been impaired by alcohol.*

This device should only be used as a screening device and may only give an indication of the possible presence of alcohol in the blood of the test subject. Correlation between breath alcohol content and blood alcohol concentration depends on many variables, including temperature and health conditions. A safe or low reading on a breath alcohol screener does not mean that the driver's reaction times can respond to any emergency encountered. The exact concentration of alcohol in the blood of the test subject cannot be exactly determined by using a breath alcohol screening device. **THIS BREATHALYSER IS A PERSONAL SCREENING DEVICE ONLY, NOT ADMISSIBLE IN THE COURT OF LAW.**

DO NOT DRINK ALCOHOL AND DRIVE!
ALWAYS USE A DESIGNATED DRIVER AFTER DRINKING ALCOHOL.
BE SAFE AND DRINK RESPONSIBLY.

Customer Care

If you have questions about AlcoDigital products or services, please contact us via phone, e-mail or mail. Our customer service agents will gladly assist you in any way they can. Please contact us via the website at www.AlcoDigital.co.uk